deepwater port. The operations manual must, at a minimum, include the requirements outlined in §150.15 of this part.

- (b) The operations manual is reviewed and approved by the Commandant (CG-5P), who may consult with the local Sector Commander, or MSU Commander, with COTP and OCMI authority, as meeting the requirements of the Act and this subchapter. The original manual is approved as part of the application process in part 148 of this chapter.
- (c) The Sector Commander, or MSU Commander, with COTP and OCMI authority may approve subsequent changes to the operations manual, provided the Commandant (CG-5P) is notified and consulted regarding any significant modifications.
- (d) The manual must be readily available on the deepwater port for use by personnel.
- (e) The licensee must ensure that all personnel are trained and follow the procedures in the manual while at the deepwater port.

[USCG-1998-3884, 71 FR 57651, Sept. 29, 2006, as amended by USCG-2013-0397, 78 FR 39180, July 1, 2013]

§ 150.15 What must the operations manual include?

The operations manual required by §150.10 of this part must identify the deepwater port and include the information required in this section.

- (a) General information. A description of the geographic location of the deepwater port.
- (b) A physical description of the deepwater port.
- (c) Engineering and construction information, including all defined codes and standards used for the deepwater port structure and systems. The operator must include schematics of all applicable systems. Schematics must show the location of valves, gauges, system working pressure, relief settings, monitoring systems, and other pertinent information.
- (d) Communications system. A description of a comprehensive communications plan, including:
 - (1) Dedicated frequencies;

- (2) Communication alerts and notices between the deepwater port and arriving and departing vessels; and
- (3) Mandatory time intervals or communication schedules for maintaining a live radio watch, and monitoring frequencies for communication with vessels and aircraft.
- (e) Facility plan. A layout plan for the mooring areas, navigation aids, cargo transfer locations, and control stations.
 - (f) The hours of operation.
- (g) The size, type, number, and simultaneous operations of tankers that the deepwater port can handle.
- (h) Calculations, with supporting data or other documentation, to show that the charted water depth at each proposed mooring location is sufficient to provide at least a net under keel clearance of 5 feet, at the mean low water condition.
- (i) Tanker navigation procedures. The procedures for tanker navigation, including the information required in paragraphs (i)(1) through (i)(9) of this section.
- (1) The operating limits, maneuvering capability, draft, net under keel clearance, tonnage, length, and breadth of the tanker that will be accommodated at each designated mooring.
- (2) The speed limits proposed for tankers in the safety zone and area to be avoided around the deepwater port.
- (3) Any special navigation or communication equipment that may be required for operating in the safety zone and area to be avoided.
- (4) The measures for routing vessels, including a description of the radar navigation system to be used in operation of the deepwater port:
 - (i) Type of radar;
 - (ii) Characteristics of the radar;
 - (iii) Antenna location;
- (iv) Procedures for surveillance of vessels approaching, departing, navigating, and transiting the safety zone and area to be avoided;
- (v) Advisories to each tanker underway in the safety zone regarding the vessel's position, deepwater port conditions, and status of adjacent vessel traffic:
- (vi) Notices that must be made, as outlined in §150.325 of this part, by the

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tanker master regarding the vessel's characteristics and status; and

- (vii) Rules for navigating, mooring, and anchoring in a safety zone, area to be avoided, and anchorage area.
- (5) Any mooring equipment needed to make up to the single point mooring (SPM).
- (6) The procedures for clearing tankers, support vessels, and other vessels and aircraft during emergency and routine conditions.
- (7) Weather limits for tankers, including a detailed description of how to forecast the wind, wave, and current conditions for:
- (i) Shutdown of cargo transfer operations;
- (ii) Departure of the tanker from the mooring;
- (iii) Prohibition on mooring at the deepwater port or SPM; and
- (iv) Shutdown of all deepwater port operations and evacuation of the deepwater port.
- (8) Any special illumination requirements for vessel arrival, discharge, and departure operations.
- (9) Any special watchstanding requirements for vessel transiting, mooring, or anchoring.
- (j) Personnel. The duties, title, qualifications, and training of all deepwater port personnel responsible for managing and carrying out the following deepwater port activities and functions:
 - (1) Vessel traffic management;
 - (2) Cargo transfer operations;
 - (3) Safety and fire protection;
- (4) Maintenance and repair operations;
 - (5) Emergency procedures; and
 - (6) Deepwater port security.
- (k) The personnel assigned to supervisory positions must be designated, in writing, by the licensee and have the appropriate experience and training to satisfactorily perform their duties. The Commandant (CG-5P) will review and approve the qualifications for all proposed supervisory positions.
- (1) Cargo transfer procedures. The procedures for cargo transfer must comply with the applicable requirements of parts 154 and 156 for oil, and subpart B (Operations) to part 127 for natural gas, respectively, of this chapter, including the requirements specified in para-

graphs (1)(1) through (1)(10) of this section.

- (1) The requirements for oil transfers in accordance with subpart A to part 156 of this chapter regarding:
 - (i) Pre-transfer conference;
- (ii) Inspection of transfer site and equipment such as hoses, connectors, closure devices, monitoring devices, and containment:
- (iii) Connecting and disconnecting transfer equipment, including a floating hose string for a single point mooring (SPM);
- (iv) Preparation of the Declaration of Inspection; and
 - (v) Supervision by a person in charge.
- (2) The requirements for natural gas transfers in accordance with subpart B to part 127 of this chapter regarding:
 - (i) Pre-transfer conference;
- (ii) Inspection of transfer site and equipment such as hoses, connectors, closure devices, leak monitoring devices, and containment;
- (iii) Connecting and disconnecting of transfer equipment, including to a floating hose string for a SPM;
- (iv) Line purging to test for leaks and to prepare for cool-down or heat-up phases as appropriate;
- (v) Preparation of the Declaration of Inspection; and
- (vi) Supervision by a deepwater port person in charge.
- (3) The shipping name of, and Material Safety Data Sheet on, any product transferred
- (4) The duties, title, qualifications, and training of personnel of the deepwater port designated as the person in charge and responsible for managing cargo transfers, including ballasting operations if applicable to the deepwater port, in accordance with subpart D of part 154 for oil, and subpart B (Operations) of part 127 for natural gas, respectively, of this chapter.
- (5) Minimum requirements for watch personnel on board the vessel during transfer operations, such as personnel necessary for checking mooring gear, monitoring communications, and maintaining propulsion and steering on standby.
- (6) The start up and completion of pumping.
- (7) Emergency shutdown.

- (8) The maximum relief valve settings, the maximum available working pressure, and hydraulic shock to the system without relief valves, or both.
- (9) Equipment necessary to discharge cargo to the port complex without harm to the environment or to persons involved in the cargo transfer, including piping, adapters, bolted flanges, and quick-disconnect coupling.
- (10) A description of the method used to water and de-water the single point mooring hoses when required.
- (m) Unusual arrangements that may be applicable, including:
- (1) A list and description of any extraordinary equipment or assistance available to vessels with inadequate pumping capacity, small cargoes, small diameter piping, or inadequate crane capacity; and
- (2) A description of special storage or delivery arrangements for unusual cargoes; for example, cool-down requirements for transfer system components prior to transfer of liquefied natural gas.
- (n) Maintenance procedures. A maintenance program to document service and repair of key equipment such as:
 - (1) Cargo transfer equipment;
- (2) Firefighting and fire protection equipment;
- (3) Facility support services, such as generators, evaporators, etc.;
 - (4) Safety equipment; and
 - (5) Cranes.
- (o) A waste management plan comparable to §151.57 of this chapter.
- (p) Occupational health and safety training procedures. Policy and procedures to address occupational health and safety requirements outlined in \$\\$\\$150.600 to 150.632 of this part, including:
- (1) Employee training in safety and hazard awareness, and proper use of personnel protective equipment;
- (2) Physical safety measures in the workplace, such as housekeeping and illumination of walking and working areas:
 - (3) Fall arrest;
 - (4) Personnel transfer nets;
- (5) Hazard communication (right-to-know):
- (6) Permissible exposure limits;
- (7) Machine guarding;
- (8) Electrical safety;

- (9) Lockout/tagout;
- (10) Crane safety;
- (11) Sling usage;
- (12) Hearing conservation;
- (13) Hot work:
- (14) Warning signs;
- (15) Confined space safety; and
- (16) Initial and periodic training and certification to be documented for each deepwater port employee and for visitors, where appropriate; for example, safety orientation training.
- (q) Emergency notification procedures. Emergency internal and external notification procedures:
- (1) Names and numbers of key deepwater port personnel;
- (2) Names and numbers of law enforcement and response agencies:
- (3) Names and numbers of persons in charge of any Outer Continental Shelf facility that, due to close proximity, could be affected by an incident at the deepwater port.
- (r) Quantity, type, location, and use of safety and fire protection equipment, including the fire plan.
- (s) Aerial operations such as helicopter landing pad procedures.
- (t) Deepwater port response procedures for:
 - (1) Fire:
 - (2) Reportable product spill;
- (3) Personnel injury, including confined space rescue; and
- (4) Terrorist activity, as described in the deepwater port security plan.
- (u) Emergency evacuation procedures comparable to §146.140(d) of this chapter.
- (v) Designation of and assignment of deepwater port personnel to response teams for specific contingencies.
- (w) Individual and team training for incident response, in accordance with 46 CFR 109.213, to cover:
 - (1) Care and use of equipment;
- (2) Emergency drills and response, to include:
- (i) Type;
- (ii) Frequency, which must be at least annually; and
- (iii) Documentation, including records, reports and dissemination of "lessons learned".
- (3) Documentation of the following minimum training requirements for response team members:
 - (i) Marine firefighting training;

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- (ii) First aid/CPR;
- (iii) Water survival;
- (iv) Spill response and clean up;
- (v) Identification of at least one employee trained and certified at the basic level as an emergency medical technician; and
- (vi) Identification of at least two employees trained and certified as offshore competent persons in prevention of inadvertent entry into hazardous confined spaces.
- (x) Security procedures. Deepwater port operators must develop a deepwater port security plan comparable to those required by 33 CFR part 106. The plan must address at least:
- (1) Access controls for goods and materials and access controls for personnel that require positive and verifiable identification;
- (2) Monitoring and alerting of vessels that approach or enter the deepwater port's security zone;
- (3) Risk identification and procedures for detecting and deterring terrorist or subversive activity, such as security lighting and remotely-alarmed restricted areas:
- (4) Internal and external notification and response requirements in the event of a perceived threat or an attack on the deepwater port;
- (5) Designation of the deepwater port security officer;
- (6) Required security training and drills for all personnel; and
- (7) The scalability of actions and procedures for the various levels of threat.
- (y) Special operations procedures. Include procedures for any special operations, such as:
 - (1) Evacuation and re-manning;
 - (2) Refueling;
 - (3) Diving;
 - (4) Support vessel operations:
 - (5) Providing logistical services; and
- (6) Contingency response for events that could affect nearby existing Outer Continental Shelf oil and gas facilities, such as explosions, fires, or product spills.
- (z) Recordkeeping of maintenance procedures, tests, and emergency drills outlined elsewhere in the operations manual.
- (aa) Environmental procedures. A program for maintaining compliance with license conditions and applicable envi-

ronmental laws, by periodic monitoring of the environmental effects of the port and its operations, including:

- (1) Air and water monitoring in accordance with applicable Federal and State law:
- (2) A routine re-examination, not less than once every 5 years, of the physical, chemical, and biological factors contained in the deepwater port's environmental impact analysis and baseline study submitted with the license application; and
- (3) A risk management plan, addressing the potential for an uncontrolled release; or provision for more detailed studies following any uncontrolled release or other unusual event that adversely affects the environment.

[USCG-1998-3884, 71 FR 57651, Sept. 29, 2006, as amended by USCG-2013-0397, 78 FR 39180, July 1, 2013]

§ 150.20 How many copies of the operations manual must be given to the Coast Guard?

The draft operations manual must be included with the application, and the number of copies is governed by §148.115 of this chapter. At least five copies of the final operations manual, and of any subsequent amendment, must be submitted to the Commandant (CG-5P). Additional copies may be required to meet the needs of other agencies

[USCG-1998-3884, 71 FR 57651, Sept. 29, 2006, as amended by USCG-2013-0397, 78 FR 39181, July 1, 2013]

§ 150.25 Amending the operations manual.

- (a) Whenever the cognizant Sector Commander, or MSU Commander, with COTP and OCMI authority finds that the operations manual does not meet the requirements of this part, the COTP notifies the licensee, in writing, of the inadequacies in the manual.
- (b) Within 45 days after the notice under paragraph (a) of this section is sent, the licensee must submit written proposed amendments to eliminate the inadequacies.
- (c) The cognizant Sector Commander, or MSU Commander, with COTP and OCMI authority reviews the amendments and makes a determination as to the adequacy of the amendments and